



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,909	09/14/2006	Junkuan Wang	112701-753	1906
29157	7590	04/22/2008	EXAMINER	
BELL, BOYD & LLOYD LLP			MI, QIUWEN	
P.O. Box 1135				
CHICAGO, IL 60690			ART UNIT	PAPER NUMBER
			1655	
			NOTIFICATION DATE	DELIVERY MODE
			04/22/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENTS@BELLBOYD.COM

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/598,909	WANG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	QIUWEN MI	1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 23 January 2008.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) 9-11 and 15-19 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-8, 12-14, 20, 21 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

Applicant's amendment and Exhibit A, in the reply filed on 1/23/08, are acknowledged.

Any rejection that is not reiterated is hereby withdrawn.

### **Claims Pending**

Claims 1-21 are pending. Claims 9-11, 15-19 are withdrawn as they are directed toward non-elected invention groups. Claims 1-8, 12-14, 20, and 21 are examined on the merits.

### **Claim Rejections –35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 12-14, 20, and 21 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Levinson (US 5,925, 394), in view of Chu et al (US 7,108,887), as evidenced by Borradaile et al (Biochemistry 42: 1283-1291, 2003)\*, Lee et al (J. Agric. Food Chem. 50: 3988-3991, 2002)\*, and Gorinstein et al (J. Agric. Food Chem. 54: 1887-1892, 2006)\*.

This rejection is maintained for reasons of record set forth in the Office Action mailed out on 9/26/2007. Applicants' arguments filed have been fully considered but they are not deemed to be persuasive.

Applicant also argues that Levinson teaches that concentrated fresh squeezed orange juice having pulp may be whipped into a PRO-WHIP, Thus Levinson explicitly teaches away from the presently claimed subject, which required, in part, bioactive compounds in a carrier that is free of insoluble fibers (page 9, last paragraph bridging page 10). Applicant further argues that Chu is entirely directly toward citrus juices and fails to even mention milk or milk proteins any where in the specification, Chu also teaches away from the claimed matter (page 10, 2nd paragraph).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In addition, the cited references do not criticize, discredit, or otherwise discourage the solution claimed, therefore, it is not teaching away even though Levinson teaches a particular embodiment which is advantageously created with the pulp present in the juice.. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). Moreover, as indicated in the previous office action, since Chu et al teach removing the insoluble fibers from grapefruit reduces levels of less desirable components and provides an

enhanced fruit juice supply, therefore, one of ordinary skill in the art would have been motivated to exclude the insoluble fibers.

Applicant further argues that the Levinson may cause the structure of the proteins to unfold, either with heat, alkali, or acid, so that some of the original properties of the protein, and especially its biological activity, are diminished or eliminated (page 3rd paragraph).

This is not found persuasive. First of all, Levinson teaches "a fresh grapefruit or an orange may be squeezed..." (col 18, lines 65-68), thus the majority of insoluble fibers which lie in pericarpium of the grapefruit have already being excluded from the juice product. Secondly, "the grapefruit or orange juice is whipped while slowing adding a milk product" (col 19, lines 1-5), and there is no process of heat, alkali or acid is involved in the process. Although the grapefruit juice is on the acidic side as far as the pH goes, the product formed from Levinson is not materially different from the product being currently claimed.

Applicant argues that neither reference discloses or even recognizes the benefits of a composition wherein milk is used as a solvent for the extraction of both hydrophilic and hydrophobic molecules, and specifically neither reference disclose or even recognizes that by using milk or milk proteins, a composition may have increased miscibility or dispersibility in an aqueous system, stability, and bioavailability of bioactive compounds (page 10, 3<sup>rd</sup> paragraph).

In response to applicant's argument that the references fail to recognize certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., increased

miscibility or dispersibility, stability, and bioavailability of bioactive compounds) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's arguments have been fully considered but they are not persuasive, and therefore the rejections in the record are maintained.

---

### **Conclusion**

-----No claim is allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qiuwen Mi whose telephone number is 571-272-5984. The examiner can normally be reached on 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Qiuwen Mi

/P. L./

Primary Examiner, Art Unit 1655